Nuclear Feasibility Study Stakeholder Meeting Notes May 3, 2023

- 1. For policy considerations, in addition to current proposals, will you include perspective on policy best practices and concepts for consideration? Anything on state level policies that advance or support nuclear?
 - a. Yes, we will look at any state policy that pertains to nuclear. Best practices for nuclear will also be considered.
- 2. Can you please repeat what you are looking at the D.C. Cook Plant for?
 - a. We will look at the current generation in the state of Michigan and that includes Cook Nuclear Plant, and Fermi. We will look at their operating characteristics, design, and if there are any opportunities that a nuclear site may have for additional generation or small modular reactor or license renewal type extensions or subsequent license renewal applications. Those are generally accepted practices in industry at this point.
- 3. You mentioned Michigan's current nuclear sites. Will the report also touch on specific case studies of other nuclear technology development underway in the U.S. or globally?
 - a. Yes, we will be looking at different technology development that is underway and provide some degree of comparison between how far along some of those developments are. There is a Nuclear Energy Assembly dashboard where they have tried to rate the different SMRs, and different developments, and how far along they are in terms of regulatory licensing, including how financially viable they are in terms of the funding that they have backing them, etc. We will look at that available information as well as include some further insights that we have on some of those technologies.

4. Please define SMR.

- a. SMR is small modular reactor. There is a cutoff of 300 megawatts in size to be considered as a SMR. The word 'modular' in the term SMR is not well-defined.
- 5. For "coordination with other technologies," will the report examine cogeneration opportunities for Michigan industry and thermal needs?
 - a. Yes, we will consider that.
- 6. Will the study look at the unique circumstances pertaining to energy needs in the Upper Peninsula?
 - a. Although focusing on the unique circumstances pertaining to energy needs in the UP is not within the scope of the grant request, ENERCON will touch on potential benefits of SMRs/micro reactors for rural communities, including in the UP.
- 7. How might MPSC Staff or MISO help inform the report's evaluation of future energy/capacity needs for the state?
 - a. ENERCON will work with the MPSC throughout the development of the report. The MISO region is tight on capacity, which MPSC Staff closely monitors. This study will help to inform the role that potential new nuclear could play in meeting future capacity needs, which will be valuable as we move forward.

- 8. Do you think the Nuclear Regulatory Commission (NRC) will develop the needed capacity for review and permitting of SMR technology?
 - a. If you have worked in the industry much, you have noticed that the NRC has had some resource constraints. But what we have seen in the last few months is that the NRC has an arrangement with the National Laboratories to provide technical support staff. We believe that they are going to use this technical staff support to complete nuclear application reviews as they are received. Additionally, some of the rulemaking that has been a strain on NRC resources are being finalized. One example of this is the license renewal generic environmental impact statement and associated regulations and guidance, which is projected to be published by April 2024.
- 9. Will the study consider community concerns such as public perception, risks, hazards, health, and disaster response?
 - a. Yes, it is a part of our scope.
- 10. How will societal cost of carbon (or maybe "future tax") be addressed, and will any cost comparisons with other dispatchable generation be included in the report?
 - a. We are going to consider climate impacts associated with both existing facilities and with deployment of new nuclear based on the NRC's regulatory perspective. Additionally, climate change is being included in some of the newer guidance and expectations for not only new generation but license renewal as well. Nuclear costs will be provided in the report to the extent available. Costs of other resources will not be included in the report.
- 11. Will SMR design be subject to the kind of regulations prompted by the Fukushima event?
 - a. Yes, we would expect that any SMR designs deployed will address the relevant aspects of the NRC-endorsed NEI guidelines stemming from the Fukushima event, spelled out in NEI 12-06 "Diverse and Flexible Coping Strategies," commonly referred to as FLEX. ENERCON completed many FLEX modifications to the existing US reactor fleet after Fukushima to meet these regulations (guidelines).
- 12. Will the study also look at economic development opportunities of nuclear development beyond just the construction/update/extension of nuclear units, such as nuclear supply chain opportunities?
 - a. Yes, that is explicitly included in the grant request. We will be addressing supply chain.
- 13. Will this study include forecasting the capacity and energy parameters of nuclear and other resources in a commercial grade production cost or capacity expansion planning tool?
 - a. No. Forecasting capacity was not included in the parameters of the study as laid out in Public Act 218 of 2022.
- 14. Will the study look at existing engineering degree programs to support future needs for engineering talents?
 - a. We intend to look at education as part of the assessment.
- 15. Can you give another refresher on the timeline for developing the study?
 - a. ENERCON will work in the next several months to develop the draft study. We anticipate a stakeholder meeting in August, with an opportunity for stakeholder feedback on the developing study. ENERCON will have a draft report ready in the December timeframe with another opportunity for stakeholder feedback on the draft report. The final report is due to the MPSC in February 2024.

16. When is the next workshop?

a. We are targeting the August timeframe. More details will be shared via the listserv and the webpage as we get closer to August.

17. Will the study look at the impact to welfare of individuals in environmental injustice communities?

a. ENERCON will evaluate environmental justice (EJ) as part of the environmental, ecological, health and climate impact feasibility evaluations. The environmental considerations to be evaluated include the following: land use (e.g., dedicated land uses, coastal zone management areas, and land use land cover statistics), ecology (e.g., state and federally listed threatened and endangered species, critical habitat, and essential fish habitat), human health (e.g., microbiological hazards), climate change (e.g., climate data trends based on available public models in relation to nuclear deployment), and environmental justice (e.g., a review of the MIEJScreen results for Michigan, state and federally recognized Native American Tribes, and communities with special cultural practices). A socioeconomic evaluation will also be included in the feasibility report that evaluates workforces, local and state tax base, and job creation.

18. What metrics will be used to compare nuclear to other resources, i.e., LCOE, V/C, LANCOE?

a. Nuclear costs will be compared to MISO Cost-of-new-entry (CONE) and possibly the equivalent in PJM. Cost comparisons to other resources are beyond the scope of this report.